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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,490	04/20/2006	Kishor Gajanan Agnihotri	27362U	2404
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EXAMINER HAMMER, KATIE L				
ART UNIT		PAPER NUMBER		
1761				
MAIL DATE		DELIVERY MODE		
01/11/2012		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/576,490

## Applicant(s)

AGNIHOTRI, KISHOR GAJANAN

## Examiner

KATIE L. HAMMER

## Art Unit

1761

**Period for Reply**  
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 5) ☒ Claim(s) 27-36 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 27-36 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-C1000)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_

### DETAILED ACTION

1. This Final Action is reissued in response to Applicant's Request for Reissuance of Office Action received on July 8, 2011 and the Applicant's Claims and Remarks filed on March 22, 2011. Claims 1-26 have been cancelled. Claims 27-36 are newly added.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 27-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosann et al. (US Pat. 5,917,118, hereinafter "Kosann") in view of Williams et al. (US Pat. 3,056,275, hereinafter "Williams").

Regarding claims 27 and 31, Kosann discloses an apparatus and method for dyeing fibers or filaments (col. 1, lines 49-62) comprising a prewetting trough, a dye bath, a drying arrangement (Figure 1 and col. 3, lines 9-11), and a supporting system

comprising two porous fabric belt for carrying fibers or filaments, and guide rollers and nip rollers configured to guide the dual belt configuration and fibers or filaments through the pre-wetting trough, the dye bath and the drying arrangement (Figure 3, structure 61a/b; col. 3, lines 32-37), wherein the supporting system is configured to support the fibers or filaments to take up tension between the guiding rollers (figure 4), thereby allowing the fibers to flow freely for dyeing fibers or filaments continuously and homogeneously without being disturbed by the tension (inherent to the dual-belt configuration). Kosann teaches the dual belt conveyor system to be "perforated top and bottom allowing penetration of the dye solution and other solutions utilized in the process while holding the cotton batt together" (col. 3, lines 35-37). Though Kosann does not explicitly disclose the material of which the perforated belt is to be made of, the examiner contends the applicant's teaching of "fabric roll", or belt, reads on Kosann's disclosure of "perforated belt". Kosann further discloses dual-belt conveying system to convey the articles to be dyed, through the bath and towards the steamer (col. 3, lines 32-35), which suggests and obviates the continuous fabric roll limitation as claimed.

Kosann discloses the invention substantially as claimed above. However, Kosann fails to disclose the apparatus and method for dyeing fibers or filaments to be comprised of a **plurality** of prewetting troughs, **plurality** of dye baths, and that the belt conveyor system comprises of a fabric roll.

Such teaching of plurality of prewetting troughs and dye baths are well known in the art. Furthermore, Williams teaches a plurality of prewetting troughs, plurality of dye baths in an apparatus and method for dyeing fibers or filaments utilizing a support

system utilizing a dual-belt type conveyor system for the propose of continuously and homogeneously dyeing fibers or filaments.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have provided a plurality of prewetting troughs and a plurality of dye baths in Kosann in order to provide for continuously and homogeneously dyeing of fibers or filaments as taught by Williams.

Regarding claims 28-29, Kosann teaches the dual belt conveyor system to be "perforated top and bottom allowing penetration of the dye solution and other solutions utilized in the process while holding the cotton batt together" (col. 3, lines 35-37). Though Kosann does not explicitly disclose the material of which the perforated belt is to be made of, the examiner contends the applicant's teaching of "wherein the belt is a synthetic or natural fabric" or "blended fabric", reads on Kosann's disclosure of "perforated belt".

Regarding claim 30, Kosann teaches the dual belt conveyor system to be "perforated top and bottom allowing penetration of the dye solution and other solutions utilized in the process while holding the cotton batt together" (col. 3, lines 35-37). The examiner construes Kosann's disclosure of the belt material "allowing penetration of the dye solution and other solutions" as inherently meeting the claimed limitation of "inert to dyeing" in the instant claim. It would be understood by one skilled in the art that a belt allowing dye solution and other solutions to pass through would inherently require the belt material be inert to dye solution such that the belt material would not interfere or

interact with the dye solution or other solutions leading to adherence of dye to the belt material leading to clogging and the lack of penetration as disclosed.

Regarding claims 32-33, Kosann discloses an apparatus and method for dyeing fibers or filaments wherein cotton fibers (col. 4, line 9) or filaments are carried between porous belts.

Regarding claim 34, Kosann discloses a method for dyeing fibers or filaments wherein cotton fibers (col. 4, line 9) or filaments are carried between porous belts. The examiner construes this teaching as meeting the limitation of fibers carried in loose form.

Regarding claim 35, Kosann discloses a method for dying fibers or filaments wherein the dye is a vat dye (col. 4, line 7).

Regarding claim 36, Kosann discloses a method wherein the at least one fiber or filament is subjected to "vat dye" (col. 4, line 7). Applicant's teaching of indigo dyeing reads on Kosann's disclosure as indigo dyeing is a well known vat dye. Furthermore, Kosann discloses an "oxidizing applicator" (abstract) which lends to an inherent disclosure of indigo dyeing as indigo dye is affixed to fibers via oxidative processes.

#### ***Response to Arguments***

4. Applicant's arguments filed 3/22/2011 have been fully considered but they are not persuasive. The Applicant argues that Kosann fails to teach or suggest "a supporting system comprising two porous fabric belts". The Examiner disagrees and contends that Kosann's disclosure of the dual belt conveying configuration disclosed in

col. 3, lines 32-35 reads on the Applicant's claimed limitation of a supporting system comprised of two porous fabric belts. Further, the Applicant argues that Kosann fails to disclose or suggest that the belt is porous. Kosann teaches the belt as perforated, which the Examiner contends as meeting the claimed limitation of "porous" within the broadest reasonable interpretation. The Merriam-Webster dictionary defines porous as possessing or full of pores, and permeable to fluids. Kosann's disclosure of "perforated" dual belts meets this interpretation of "porous". The Applicant further argues that Kosann fails to disclose porous fabric belt by teaching a belt made of woven wire. The Examiner contends that Kosann meets the claimed limitation within the broadest reasonable interpretation by teaching "woven wire", as relied upon above. Marriam Webster dictionary defines "fabric" as "a material that resembles cloth". Without further limitations defining the material of the claimed fabric belt at the exclusion of the belt disclosed by Kosann, the Examiner contends that such definition and interpretation of the claimed limitation, within broadest reasonable interpretation, is met by Kosann's disclosure.

### ***Conclusion***

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATIE L. HAMMER whose telephone number is (571)270-7342. The examiner can normally be reached on Monday to Friday, 9:30amEST to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/KLH/

Katie L. Hammer  
Art Unit 1761  
January 9, 2012

/Harold Y Pyon/  
Supervisory Patent Examiner, Art Unit 1761